

EXHIBIT JRB-2 (REFERENCED DISCOVERY RESPONSES)

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VOTE SOLAR

DOCKET NO. 2018-318-E

**Duke Energy Progress' Response to
Vote Solar's First Set of Written Discovery Request
Pursuant to S.C. Code Ann. § 58-4-55
Docket No. 2018-318-E
Related to Hager Testimony
Date of Request: January 22, 2019
Date of Response: February 1, 2019**

☐ CONFIDENTIAL

☒ NOT CONFIDENTIAL

The attached response to First Data Request #1-2, was provided to me by the following individual: Sumita M. Deshmukh, Rates & Regulatory Strategy Manager, Rate Case Planning & Execution, and was provided to Vote Solar under my supervision.

Heather Shirley Smith
Deputy General Counsel
Duke Energy Progress, LLC

DUKE ENERGY PROGRESS

Request:

- 1-2 Please refer to Hager Direct p. 14, lines 16-19.
- (a) Does the Company's Minimum System Study consider the distribution assets needed if every customer had "some minimum level of usage" to be composed of: (1) the smallest equipment the Company customarily installs, (2) the smallest equipment present on its system, (3) the smallest size equipment currently available in the market currently, or (4) some other benchmark.
 - (b) If your response to (a) is "some other benchmark", please explain how the minimum sized equipment is determined in detail.
 - (c) Please explain in detail the Company's justification for its selection of minimum size system components for use in its Minimum System Study.
 - (d) Please state whether Witness Hager is aware of any other Duke affiliates that perform Minimum System Studies using a different methodology, and if so, explain why the method Duke Energy Progress is employing for the purpose of its cost of service study in this application is more suitable.

Response:

In response to (a), the Company's Minimum System Study is based on the smallest equipment the Company customarily installs.

In response to (b), N/A.

In response to (c), this method is most appropriate because it takes into consideration the Company's actual practices and system and is most consistent with the description of the minimum size method in the NARUC Cost of Service Manual (page 91).

In response to (d), Witness Hager is not aware of any other Duke affiliates that perform Minimum System Studies using a different methodology.

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**Duke Energy Progress' Response to
Vote Solar's First Set of Written Discovery Request
Pursuant to S.C. Code Ann. § 58-4-55
Docket No. 2018-318-E
Related to Rate Design
Date of Request: January 22, 2019
Date of Response: February 1, 2019**

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The attached response to First Data Request #1-7, was provided to me by the following individual: Steven B. Wheeler, Rates & Regulatory Strategy Director, Pricing, Load Analysis & Regulatory Solutions, and was provided to Vote Solar under my supervision.

Heather Shirley Smith
Deputy General Counsel
Duke Energy Progress, LLC

DUKE ENERGY PROGRESS

Request:

- 1-7 Please refer to Wheeler Direct Exhibit No. 5.
- (a) For Schedule RES (p. 1), please identify the number of customers that fell within each monthly energy usage band based on average monthly energy use during the test year. For example, XXXX customers had average energy use of 0 – 100 kWh per month. In your response, please separately identify the number of customers:
- i. With on-site solar generation
 - ii. Without on-site solar generation
- (b) For Schedule R-TOUD (p. 1) Please identify the number of customers that fell within each monthly energy usage benchmark based on average monthly energy use during the test year. For example XXXX customers had average energy use from 0 – 100 kWh per month.
- i. With on-site solar generation
 - ii. Without on-site solar generation

Response:

Residential annual customer bills by usage block was provided in response to ORS AIR 1-14 (see attached file: “Annual AIR 1-14 DEP SC Blocking_Jan2017-Dec2017.xlsx”). This information is provided at a greater level of detail than used for the sample bills provided in Exhibit 5. Blocking information isn’t readily available for customers with and without solar generation.

[Annual AIR 1-14 DEP SC Blocking_Jan2017-Dec2017.xlsx]

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DOCKET NO. 2018-318-E

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**Duke Energy Progress' Response to
Vote Solar's First Set of Written Discovery Request
Pursuant to S.C. Code Ann. § 58-4-55
Docket No. 2018-318-E
Related to Bateman Testimony
Date of Request: January 22, 2019
Date of Response: February 1, 2019**

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☒ NOT CONFIDENTIAL

The attached response to First Data Request #1-8, was provided to me by the following individual: Sumita M. Deshmukh, Rates & Regulatory Strategy Manager, Rate Case Planning & Execution, and was provided to Vote Solar under my supervision.

Heather Shirley Smith
Deputy General Counsel
Duke Energy Progress, LLC

DUKE ENERGY PROGRESS

Request:

- 1-8 Please refer to Bateman Direct Exhibit No. 2. Please provide an alternative version of this exhibit depicting the results of the cost of service study using the Basic Customer method rather than the Minimum System method, in which 100% of the costs recorded in FERC Accounts 364 through 368 are classified as demand related.

Response:

The attached "*DEP VS DR 1-8 Bateman 2 No Min.xlsx*" contains the requested version of Bateman exhibit 2, spreading the proposed revenue increase across South Carolina retail customer classes based on a cost of service without the minimum system approach to allocating distribution plant.

This reflects the Basic Customer Method as described in the Direct Testimony of Janice Hager, with the exception that all transformer plant in account 368 not assigned to extra facilities is allocated wholly at non-coincident peak demand. While DE Progress did allocate a portion of transformer plant as the customer-related portion of distribution plant in its prior rate case in Docket No. 2016-227-E, it has removed that assumption for purposes of this "No Minimum System" analysis.

[DEP VS DR 1-8 Bateman 2 No Min.xlsx]

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**Duke Energy Progress' Response to
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Docket No. 2018-318-E
Related to Rate Design
Date of Request: January 22, 2019
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The attached response to First Data Request #1-12, was provided to me by the following individual: Steven B. Wheeler, Rates & Regulatory Strategy Director, Pricing, Load Analysis & Regulatory Solutions, and was provided to Vote Solar under my supervision.

Heather Shirley Smith
Deputy General Counsel
Duke Energy Progress, LLC

DUKE ENERGY PROGRESS

Request:

- 1-12 Please provide any analysis that the Company has performed for the purpose of evaluating the bill impact of the Company's proposed residential customer charge increases on:
- (a) Low-income customers.
 - (b) Customers in each class with on-site generation participating in the net energy metering schedule.

Response:

The Company's review of rate impacts considers various levels of consumption, but does not separately consider customer attributes such as income level or net metering participation.

Recovering fixed costs via a kwh charge has the following detrimental consequences: 1) high usage customers subsidize low usage customers; 2) low use customers do not pay the full cost of the utility plant installed to serve them; and 3) does not provide an accurate price signal regarding the Company's costs upon which customers can make economic decisions to make investments that reduce kWh consumption.

**Duke Energy Progress' Response to
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The attached response to First Data Request #1-13, was provided to me by the following individual: Sumita M. Deshmukh, Rates & Regulatory Strategy Manager, Rate Case Planning & Execution, and was provided to Vote Solar under my supervision.

Heather Shirley Smith
Deputy General Counsel
Duke Energy Progress, LLC

DUKE ENERGY PROGRESS

Request:

- 1-13 On page 5 of Witness Hager's testimony, Hager testifies that she "[has] reviewed DE Progress' cost of service studies that were prepared and used in the rate design in this case."
- (a) Please provide electronic spreadsheet versions, with all cell formulas and fill linkages intact, of all "DE Progress' cost of service studies that were prepared and used in the rate design in this case."
- (b) Please provide electronic copies of all spreadsheet files linked to the requested electronic spreadsheets.

Response:

In response to (a), this information has been provided in the following data requests:

DEP ORS AIR 1-9 - Per Book Cost of Service Study
DEP ORS DR 1-9 Filed SC 1 CP 2017 PB COS.xls

DEP ORS AIR 1-10 – Present Rates Annualized Cost of Service Study
DEP ORS DR 1-10 Filed SC 1 CP 2017 Adj COS.xls

DEP ORS AIR 1-11 – Proposed Rates Cost of Service Study
DEP ORS DR 1-11 Filed SC 1 CP 2017 Adj COS Prop.xls

DEP ORS AIR 1-17 – Present Rates Annualized Unbundled Cost of Service Study
DEP ORS DR 1-17 Unbundled 2017 DEP SC 1CP Adj COS

In response to (b), there are no spreadsheet files linked to the requested electronic spreadsheets in (a).

[DEP ORS DR 1-9 Filed SC 1 CP 2017 PB COS.xls]

[DEP ORS DR 1-10 Filed SC 1 CP 2017 Adj COS.xls]

[DEP ORS DR 1-11 Filed SC 1 CP 2017 Adj COS Prop.xls]

[DEP ORS DR 1-17 Unbundled 2017 DEP SC 1CP Adj COS.xls]

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The attached response to First Data Request #1-20, was provided to me by the following individual: Sumita M. Deshmukh, Rates & Regulatory Strategy Manager, Rate Case Planning & Execution, and was provided to Vote Solar under my supervision.

Heather Shirley Smith
Deputy General Counsel
Duke Energy Progress, LLC

DUKE ENERGY PROGRESS

Request:

- 1-20 On page 16 of Witness Hager's testimony, she testifies that "Witness Wheeler relied upon costs allocated as being customer-related in the Cost of Service Study in developing his recommendation regarding the Basic Facilities Charge."
- (a) Please provide an electronic spreadsheet version, with all cell formulas and file linkages intact, of the unit cost study relied on by Company witness Steven B. Wheeler to develop his recommendation regarding the residential Basic Facilities Charge.
- (b) Please provide an electronic spreadsheet version, with all cell formulas and file linkages intact, of the unit cost study associated with a version of the Company's cost of service study which classifies 100% of the costs recorded in FERC Accounts 364 through 368 as demand-related (i.e., relies on the Basic Customer method to classify distribution plant costs.)

Response:

In response to (a), please see attached file "*Vote Solar DR 1-23 - DEP Unit Cost Study.xlsx*" which shows the unit cost study relied on by Company Witness Steven B. Wheeler to develop his recommendation regarding the residential Basic Facilities Charge. This file is also provided in response to DR 1-23 with this data request.

In response to (b), please see attached file "*ORS AIR 13-4 Wheeler Exhibit 2 wo Min System.xlsx*" which shows the unit cost study associated with a version of the Company's cost of service study which classifies 100% of the costs recorded in FERC Accounts 364 through 368 as demand-related.

[Vote Solar DR 1-23 - DEP Unit Cost Study.xlsx]

[ORS AIR 13-4 Wheeler Exhibit 2 wo Min System.xlsx]

**Duke Energy Progress' Response to
Vote Solar's First Set of Written Discovery Request
Pursuant to S.C. Code Ann. § 58-4-55
Docket No. 2018-318-E
Related to Rate Design
Date of Request: January 22, 2019
Date of Response: February 1, 2019**

☐ CONFIDENTIAL

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The attached response to First Data Request #1-36, was provided to me by the following individual: Steven B. Wheeler, Rates & Regulatory Strategy Director, Pricing, Load Analysis & Regulatory Solutions, and was provided to Vote Solar under my supervision.

Heather Shirley Smith
Deputy General Counsel
Duke Energy Progress, LLC

DUKE ENERGY PROGRESS

Request:

- 1-36 Please provide the following information regarding the Company's net metering customers as of the time of filing this application:
- (a) Total number of net metering customers (all classes);
 - (b) Number of net metering customers per rate schedule;
 - (c) Aggregate capacity of net metering facilities on each rate schedule;
 - (d) Average per customer billed usage (kWh) for residential net metering customers during each month of the test period (i.e., the average net purchase by net metering customers after energy exports to the grid from the customer-generator have been subtracted or netted from gross imports from the grid);
 - (e) Average per customer maximum demand (kW) (15-minute or hourly) during each month of the test period, if available.

Response:

The number of South Carolina net metering customers by rate schedule with the installed nameplate capacity of generation as of October 2018 is provided in the attached file (See attached file: "Vote Solar DR 1-36 – DEP Net Metering Statistics"). Monthly billed usage is not readily available for net metering customers alone; however, SC residential net metering customer annual usage for the year ended December 31, 2017, is provided in the attached file. Demand information for net metering customers is not readily available since it isn't maintained in the billing system for schedules without demand rates.

[Vote Solar DR 1-36 – DEP Net Metering Statistics]

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**Duke Energy Progress' Response to
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Pursuant to S.C. Code Ann. § 58-4-55
Docket No. 2018-318-E
Related to Rate Design
Date of Request: January 22, 2019
Date of Response: February 1, 2019**

☐ CONFIDENTIAL

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The attached response to First Data Request #1-46, was provided to me by the following individual: Steven B. Wheeler, Rates & Regulatory Strategy Director, Pricing, Load Analysis & Regulatory Solutions, and was provided to Vote Solar under my supervision.

Heather Shirley Smith
Deputy General Counsel
Duke Energy Progress, LLC

DUKE ENERGY PROGRESS

Request:

- 1-46 Please refer to Wheeler Direct at p. 36, lines 3-5 describing the derivation of class rates for the Company's proposed EDIT-1 Rider.
- (a) Please justify the use of a fully volumetric rider to refund excess deferred income taxes to customers, including how the proposed design is consistent with cost causation.
- (b) Please confirm or deny that a portion of the accumulated deferred income taxes (ADIT) that give rise to the need for the EDIT-1 Rider are associated with utility plant investments that would be classified as customer or demand-related. If your response is to deny that this statement is true, please explain in detail.

Response:

- a) As an annual adjustment rider, the use of a volumetric rate was selected for administrative ease in collecting and tracking revenues recovered in the rider. Volumetric energy rates apply to all classes allowing a uniform approach for cost recovery purposes. Energy determinants are also more predictable than demand determinants which can be significantly influenced by unusual weather events.
- b) The revenue requirement sought for recovery in the EDIT rider is primarily associated with tax impacts associated with utility plant-related costs.

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**Duke Energy Progress' Response to
Vote Solar's First Set of Written Discovery Request
Pursuant to S.C. Code Ann. § 58-4-55
Docket No. 2018-318-E
Related to Grid Rider
Date of Request: January 22, 2019
Date of Response: February 1, 2019**

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☒ NOT CONFIDENTIAL

The attached response to First Data Request #1-66, was provided to me by the following individual: Steven B. Wheeler, Rates & Regulatory Strategy Director, Pricing, Load Analysis & Regulatory Solutions, and was provided to Vote Solar under my supervision.

Heather Shirley Smith
Deputy General Counsel
Duke Energy Progress, LLC

DUKE ENERGY PROGRESS

Request:

- 1-66 Please provide all studies, analyses, memos, workpapers, or written documents of any nature regarding the impacts to ratepayers from the additional increase on monthly bills that would be caused by the proposed Rider related to the Company's Grid Improvement Plan.

Response:

Pursuant to clarification from counsel:

- 1) See attachment to the response to Vote Solar Data Request 1-25: "ORS AIR 1-13 Rate Design File.xlsx". The calculation can be found at cell AE7 on the "Wheeler Exh 3" worksheet.
- 2) See: "Vote Solar DR 1-66 – DEP Grid Impacts Revenue Requirement.xlsx"
- 3) See: "Vote Solar DR 1-66 –GIP Budgets and Rates.xlsx"

[Vote Solar DR 1-66 – DEP Grid Impacts Revenue Requirement.xlsx]

[Vote Solar DR 1-66 –GIP Budgets and Rates.xlsx]